

# Proceedings of the Iowa Academy of Science

---

Volume 25 | Annual Issue

Article 3

---

1918

## Table of Contents

Copyright ©1918 Iowa Academy of Science, Inc.

Follow this and additional works at: <https://scholarworks.uni.edu/pias>

---

### Recommended Citation

(1918) "Table of Contents," *Proceedings of the Iowa Academy of Science*, 25(1), 8-11.

Available at: <https://scholarworks.uni.edu/pias/vol25/iss1/3>

This Front Matter is brought to you for free and open access by the Iowa Academy of Science at UNI ScholarWorks. It has been accepted for inclusion in Proceedings of the Iowa Academy of Science by an authorized editor of UNI ScholarWorks. For more information, please contact [scholarworks@uni.edu](mailto:scholarworks@uni.edu).

## TITLES OF PAPERS RECEIVED

*The number following a title indicates the page of the Proceedings on which it may be found.*

President's Address: Does the History of Science Have a  
Place in the College Curriculum?.....L. S. Ross.....33

### *Physics and Psychology.*

	Page
Temperature-Time Relations in Canned Foods During Sterilization .....	George E. Thompson..... 39
(a) Some Structural Features of Selenium Deposited by Condensation from the Vapor State above the Melting Point.	
(b) The Sublimation Curve for Selenium Crystals of the Hexagonal System .....	L. E. Dodd
Stroboscopic Velocities in the Tonoscope.....	
.....H. R. Fossler and L. E. Dodd.....	49
The Eclipse Expedition to Matheson, Colorado, June 8, 1918 .....	
.....D. W. Morehouse	
The X-Ray Spectrum of Tungsten.....	O. B. Overn..... 59
A New Principle in the Design of Rheostats of Large Capacity .....	
.....H. L. Dodge	
On the Coefficient of Absorption of Photoelectrons in Silver and Platinum .....	Otto Stuhlman, Jr..... 61
On the Production of Opaque and the Color of Transparent and Semitransparent Metallic Films..	Otto Stuhlman, Jr.
Hall Effect in Thin Silver Films.....	G. R. Wait
The Effect of Pressure upon the Conductivity of Selenium....	
.....E. O. Dieterich	
The Measurement of Basic Capacities in Motor Ability.....	
.....Carl E. Seashore.....	67

### *Zoology and Allied Subjects.*

Bird Records of the Past Winter (1917-1918) in the Upper Missouri Valley.....	T. C. Stephens..... 71
A Note on Molluscan Behavior.....	T. C. Stephens
Birds of Union County, South Dakota.....	T. C. Stephens ..... 85
An Unusual Example of Incisor Growth in the Western Fox Squirrel.....	Dayton Stoner. .... 105
Pharyngeal Derivatives of Amblystoma.....	
.....Francis Marsh Baldwin .....	111
Economic Entomology and Food Conservation.....	
.....R. L. Webster.....	117
A List of the Birds Found in Marshall County, Iowa.....	
.....Ira N. Gabrielson .....	123
The Influence of Floods upon Animals.....	D. M. Brumfiel.....155
Notes on a Wood Borer.....	H. E. Jaques .....175
The Life and Behavior of the House Spider.....	H. E. Ewing.....177
A Preliminary List of the Acarina of Iowa....	Albert Hartzell .....205

TITLES OF PAPERS PRESENTED

9

Page

Notes on the Food of the Yellow Perch in Cayuga Lake.....	
.....W. A. Hoffman .....	213
The Cranial Nerves of the Dogfish.....	Sally P. Hughes
Spiders of the Family Attidæ Collected in the Vicinity of Ames.....	I. L. Ressler .....
	221

*Botany.*

The White Waterlily of McGregor, Iowa....	Henry S. Conard .....	235
The Classification of Plants.....	Henry S. Conard.....	237
An Unusual Black Walnut.....	L. H. Pammel .....	241
An Annual Sweet Clover.....	L. H. Pammel .....	249
Notes on the Perennial Mycelium of a Few Parasitic Fungi .....	L. H. Pammel.....	259
A Study of the Formation and Development of the Flower Buds of Jonathan and Grimes Golden in Relation to Different Types of Soil Management.....	R. S. Kirby .....	265
An Ecological Study of the Weeds of Some Iowa Fields....	R. S. Kirby .....	
The Germination of Some Native Iowa and Exotic Tree Seeds .....	L. H. Pammel and Charlotte M. King .....	291
The Vegetative Organs of Some Perennial Grasses.....	Florence Willey.....	341
Some Anatomical Notes on the Plants of a Prairie Province .....	Ada Hayden .....	369
The Pollen and Pistil in Relation to the Germination of the Pollen in Five Varieties of Apples.....	John N. Martin .....	391
The Structure of the Seed Coat and Its Relation to the Germination of the Seeds of the Two Common Sweet Clovers.....	John N. Martin .....	
Cytological Study of the Abortion of the Pollen in the Winesap .....	John N. Martin .....	
The Endosperm of Utricularia.....	Robert B. Wylie and Alice Yocom .....	
A Miniature Vallisneria.....	Robert B. Wylie .....	
Notes on an Introduced Woodland Flora.....	R. I. Cratty.....	411
A Study in Cereal Roots.....	R. O. Westley and A. L. Bakke .....	
Some Phenological Records of Spring Flowering Plants of Henry County.....	H. E. Jaques .....	413
The Fern Flora of Northeastern Iowa.....	T. J. Fitzpatrick .....	417
Pioneer Plants on a New Levee IV.....	Frank E. A. Thone .....	423
Eradication of the Barberry in the Spring Wheat Sections of the United States with Special Reference to Iowa.....	I. E. Melhus .....	
Plants of Southeastern Alaska.....	J. P. Anderson .....	427

*Chemistry and Agricultural Chemistry.*

Ames and Iowa Sections American Chemical Society.  
 Iowa Chemists and the War. A Discussion. Leaders: E. W.  
 Rockwood, Iowa Section, and W. F. Coover, Ames Section

A Consideration of Some Soil Acidity Methods.....	
.....R. E. Stephenson	
Color Effect of the Furane Nucleus.....	
.....Nellie M. Naylor and Raemer R. Renshaw	
The Determination of Surface Tension by the Drop Weight Method.....	
.....W. D. Harkins and F. E. Brown	
The Laboratory Preparation of Nickel Carbonyl.....	
.....J. S. Coye and R. R. Renshaw	
Studies of the Gastric Residuum III. The Inorganic Constituents of a Composite Sample of Gastric Residuum Obtained from 70 Apparently Normal Men, and their Comparison with the Inorganic Constituents of a Composite Saliva Sample Obtained from the Same Individuals.....	
.....Chester C. Fowler and John H. Buchanan	
Studies of the Gastric Residuum IV. Amino Acid Nitrogen.....	
.....Ruth B. Cessna and Chester C. Fowler	
A Study of Over 70 Twenty-four Hour Urine Samples Obtained from Apparently Normal Women.....	
.....Zelma Zentmire and Chester C. Fowler	
The Relation of the Composition of Iron and Mild Steel to Corrosion.....	
.....J. S. Coye	
Methods for the Determination of Total Nitrogen in Soils Containing Rather Large Amounts of Nitrates.....	
.....R. S. Snyder	
The Number and Action of Molds in the Soil.....	
.....P. E. Brown and W. V. Halversen	
The Production of Acid Phosphate by Composting Sulfur and Rock Phosphate.....	
.....P. E. Brown and B. J. Firkins	
The Growth of Legumes and the Nitrogen Problem.....	
.....P. E. Brown and J. H. Stallings	
The Nature of Soil Acidity.....	
.....R. S. Potter and R. E. Stephenson	
The Organic Phosphorus of Soil..R. S. Potter and R. S. Snyder	
A Study of the Comparative Availability of Different Forms of Phosphorus in Nutrient Solutions.....	
.....Ross L. Bancroft	
The Oils in Cherry Plts.....	
.....Nicholas Knight and Harold L. Maxwell	
Some Problems of Water Supply for Troops.....	451
.....Jack J. Hinman, Jr.	457
A Study of Certain Green Manure Crops in Making Rock Phosphate Available in Soils.....	
.....Ross L. Bancroft and B. J. Firkins	477
The Composition and Digestibility of Sudan Grass Hay.....	
.....W. G. Gaessler and A. C. McCandlish	479
The Occurrence and Possible Toxicity of Molds in Corn Silage.....	
.....Alvin R. Lamb	491
Deterioration of Concrete Silos Due to the Corrosive Influence of Silage Acids.....	
.....S. B. Kuzirian	
Some Observations on Kendall's Method for the Determination of Iodine in Thyro'd Preparations.....	
.....S. B. Kuzirian	495

TITLES OF PAPERS PRESENTED

11

Some Improved Laboratory Methods.....	W. S. Hendrixson.....	Page 497
Further Work on Acid Potassium Phthalate as a Standard in Volumetric Analysis.....	W. S. Hendrixson.....	501
Milk as the Sole Diet of Ruminants...	Andrew C. McCandlish.....	505
Experiments with Soy Bean Meal as a Substitute in the Army Ration.....	Arthur W. Dox .....	517

*Geology*

Contributions to the Geology of Southwestern Iowa.....	George L. Smith .....	521
Progress Report on Recent Investigations of the Pleistocene in Iowa.....	George F. Kay .....	
History of the Investigation of the Pleistocene of Iowa.....	E. J. Cable .....	
Relation of the Wisconsin Drift to the Iowan Drift as Revealed in Worth County.....	Emmet J. Cable .....	539
Provincial Unity of Continental Interior Coal-fields.....	Charles Keyes.....	545
Preglacial Moingona River.....	Charles Keyes.....	551
Alpine Structures of Jasper Park.....	Charles Keyes.....	561
Park Sites Along Des Moines Valley.....	James H. Lees .....	569
The Deepest Well in the State.....	James H. Lees .....	
Some Features of the Fort Dodge Gypsum.....	James H. Lees .....	537
The Ste. Genevieve Marls of Fort Dodge and Their Fauna .....	James H. Lees and A. O. Thomas .....	539